Importance of Offline Access Skills for Students in the Digital Era

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ABSTRACT

Accessing information in the library can be done through the library space and institutional repository. Therefore, both online and offline access skills are indispensable for students. This study aims to determine the correlation between students' access skills and their intention to access information in the quantitative research method, using the SmartPLS application version 3. The studied samples are 93 students of UIN Saizu who currently sit in semesters 8 and 10 with a repository account. Results show that offline access skills affect students' intentions to access information both in the physical space and in the repository. On the other hand, online access skills affect the intensity of accessing the repository but do not significantly affect the intention of visiting the library space. Therefore, skills to explore physical materials and gain information through it are negatively correlated with their intention to access the library. This suggested that offine access skills are indispensable for UIN Saizu's students.

Keywords: Access skill; IFLA literacy theory; Academic library; Institutional repository; Theory of Reasoned Action (TRA)

1. INTRODUCTION

Information literacy skills are indispensable for students to support the success of their studies. The International Federation of Library Associations and Institutions (IFLA) divides information literacy skills into three dimensions: Access, Evaluate, and Use[1]. Advanced development in information technology, particularly with availability of digital collections, has shifted the standard of university students literacy. It also affects librarians ability to adjust to these developments, services and collections tranformed from printed materials to digital forms.

Digital skills and technologies are an ever-changing field of research[2]. As an academic library, this change in collections and services occurred at the UIN Saifuddin Zuhri (UIN Saizu) Library, Indonesia. Consequently, library management must ensure that all users can easily access the available collections. The access skills needed by students are not only onsite services in the library room but also ability for sccessing the library's online collections. Both services are available at UIN Saizu Library as research service. This service is primarily intended for final-year students to support their research for final thesis. Online services began to be prioritized when the Covid-19 pandemic affected Indonesia and the institution started to implement work from home (WFH) policy on March 16, 2020.

In the beginning, using the repository as an electronic form of research services faced several obstacles for library staff and students. Students did not understand the flow of access. At the same time, library staff was often constrained by technical

limitations, such as the availability of internet connections and pauses due to server maintenance. Students who posed low digital literacy skills could not benefit from this form of library service to the fullest[3]. However, due to restriction in physical access, digital collections in libraries were demanded higher to meet the needs of users[4-5].

A study in 2017, demonstrated that the information literacy of UIN Saizu students was 2.81 out of 4.00 scale[6]. At that time, indicators employed only considered access to printed materials and had not connected with students' intentions to access information. Further research is needed to evaluate whether online access skills and offline access skills affect students' preferences to access information in the library and institutional repository.

1.1 Hypotheses
- H1 = Offline access skills significantly affect students' intention to access online information in the repository
- H2 = Offline access skills significantly affect students' intention to access information in the library room
- H3 = Online access skills significantly affect students' intention to access online information in the repository
- H4 = Online access skills significantly affect students' intention to access information in the library room.

2. LITERATURE REVIEW
2.1 Theory of Reasoned Action
Ajzen stated that a person's intention to perform a specific behavior was influenced by two essential determinants: attitude towards behavior and social influence, or subjective norms[8]. Theory of Reasoned Action (TRA) explains that behavior is
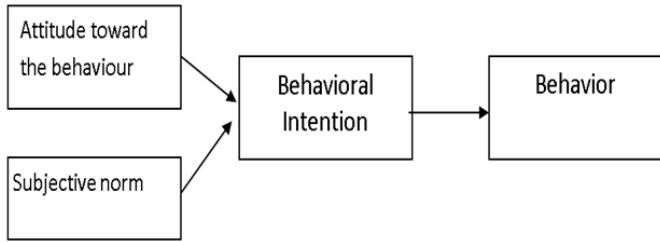
Figure 1. Theory of reasoned action[7].

carried out because individuals have an interest or desire to do so (behavioral intention) in actual activities that determine their behavior (behavioral)[9]. A person's behavioral purposes in hypothetical situations were related to his attitudes toward the behaviors in question and his normative beliefs about them[10]. Figure 1 explains that in TRA behavioral intention is influenced by attitude toward the behavior, and subjective norm.

Theory of Reasoned Action (TRA) argues that the strongest or most proximal predictor of willful behavior is a single behavioral intention[11]. The intention formed in this fashion is now available to determine the performance of the behavior[12]. TRA and the theory of planned behavior (TPB) have been used to explain the process of adopting technology from an individual perspective[13]. This theory connects belief, attitude, will (intention), and behavior (behavior)[14].

TRA is most suitable when applied to behaviors that are under the control of the individual himself, while the Theory of Planned Behavior was developed to predict those behaviors that are entirely not under the control of the individual[15].

2.2 Access Skills

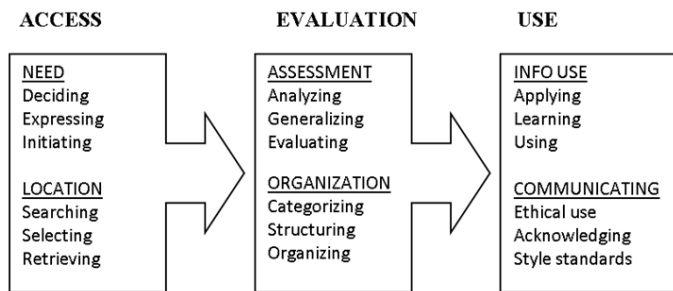Figure 2 has the meaning that the capability to access includes[1].

Figure 2. Information Literacy[1].

2.2.1 Defining and Articulating Information Needs
- Able to decide what information to look for;
- Decide what to do to find information;
- Able to express and describe the information needed;
- Initiate to search for such information.

2.2.2 Locating the Source of Information
- Identify and evaluate potential sources of information
- Choose data to retrieve;
- Find the location and reuse that information.

Access defines as the user accesses information effectively and efficiently[1]. Online access skills are related to the ability

to operate technology. Technology can help students develop creativity[2], so the skills of using technology are necessary for students[3]. University libraries must provide online facilities for their services to meet the information needs of users[4].

There is a fact that interest in filling free time by visiting the library at the age of 17-24 years is only 16.5%[5]. However, prison residents are very motivated to read and visit the library as a means of filling time[6]. Actually, whether it is important or not offline access skills in the digital era?

3. METHODOLOGY

The research was conducted through a quantitative approach by analyze the correlation using a SmartPLS application. The studied population was 1.253 students in semester 8 and 10 who were in possession of registered accounts in repository.iainpurwokerto.ac.id[16]. Samples of 93 were deducted by application of Yamane formula. The following random sampling technique was with random order using Microsoft Excel. The data source questionnaire results referring to the theory of access skills in IFLA information literacy. Another theory used was the TRA, which is linked by a SmartPLS application to justify the hypotheses.

Partial Least Square Structural Equation Modeling (PLS-SEM) has characteristics with small data which are gaining high statistical strength[17]. Structural Equation Modeling (SEM) has become a quasi-standard in marketing and management research when it comes to analyzing the cause-and-effect relationship between latent constructions[18]. This method was used to cause and effect in students's research activity in both physical space and repository. A linear variable composition can then be considered for the use of PLS-SEM[19].

PLS-SEM has the ability to directly estimate the weights for the attribute as a whole, not just for the attribute level, and calculate the fixed point (ie, determinant) of the latent variable scores that have specific implications for the respondent in detail[20]. If the model has formative measurements, in this case the following should be reported: The variance of the described target endogenous variables; Inner model of the measured path coefficient and the significance in the path coefficient ; The weight and significance of the outer model; Convergent validity; and the collinearity between indicators is calculated[21].
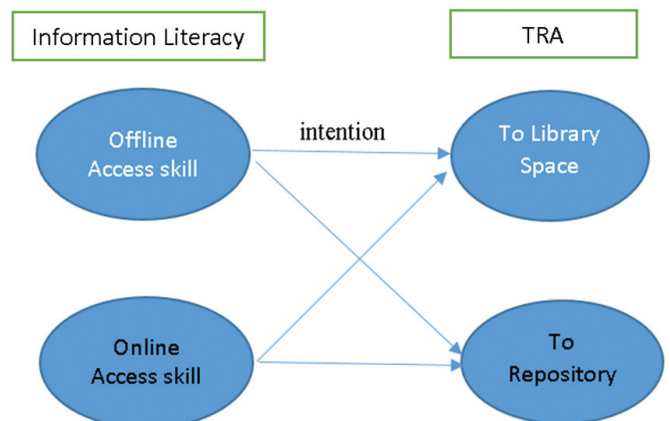

Figure 3. Research framework.

4. RESULT

4.1 Respondent Profiles

Respondents were from UIN Saifuddin Zuhri's students in semesters 8 and 10, male and female, with composition detailed in Table 1.

Table 1. Semester and gender respondent

Gender	Semester 8	Semester 10	Total	Per cent
Male	8	6	14	15,05
Female	60	19	79	84,95
Total	68	25	93	100
Per cent	73,12	26,88	100	

The respondents' genders were 79 Female and 14 Male, base on self-identity through the questionnaire. Respondents were sorted in random order based on the student's parent number to minimize tendency over specific gender.

The random sampling technique carried out in the study made the distribution of respondents not the same in numbers

Table 2. Construct reliability and validity

	Cronbach's alpha	rho_A	Composite reliability	AVE
Access repository	0.757	0.779	0.859	0.671
Offline access skill	0.747	0.749	0.888	0.798
Online access skill	0.769	0.771	0.896	0.812
Visit library space	0.758	0.769	0.860	0.672

Table 3. Discriminant validity

	Access to repository	Offline access skill	Online access skill	Visit library space
Access to repository	0.819			
Offline access skill	0.532	0.893		
Online access skill	0.546	0.696	0.901	
Visit library space	0785	0.665	0.503	0.820

between semester 8 and semester 10, as well as between males and females. Selection of respondents in order of random lists in excel applications. However, because the population is homogeneous, namely students who are working on the final project, the researchers forwarded the data of selected respondents for further processing.

4.2 Validity and Reliability

Figure 4 gives a description that the lowest loading factor value is 0.763, meaning that all indicators have strong validity. All hands are strongly correlated to their latent variables. It was constructed with reflective indicators, assuming that the covariance is between the model's measurements which was explained by the variants that are manifestations of its construct domain.

The outer weight as shown in Fig. 5 describes the weight value of each latent changer.

Table 2 indicates that the latent variable is reliable since Cronbach's alpha and composite reliability values are above 0.7.

Table 3 indicates that the validity value of the discriminant is above 0.7. So it can be said that all its indicators have represented or can describe its latent variables.
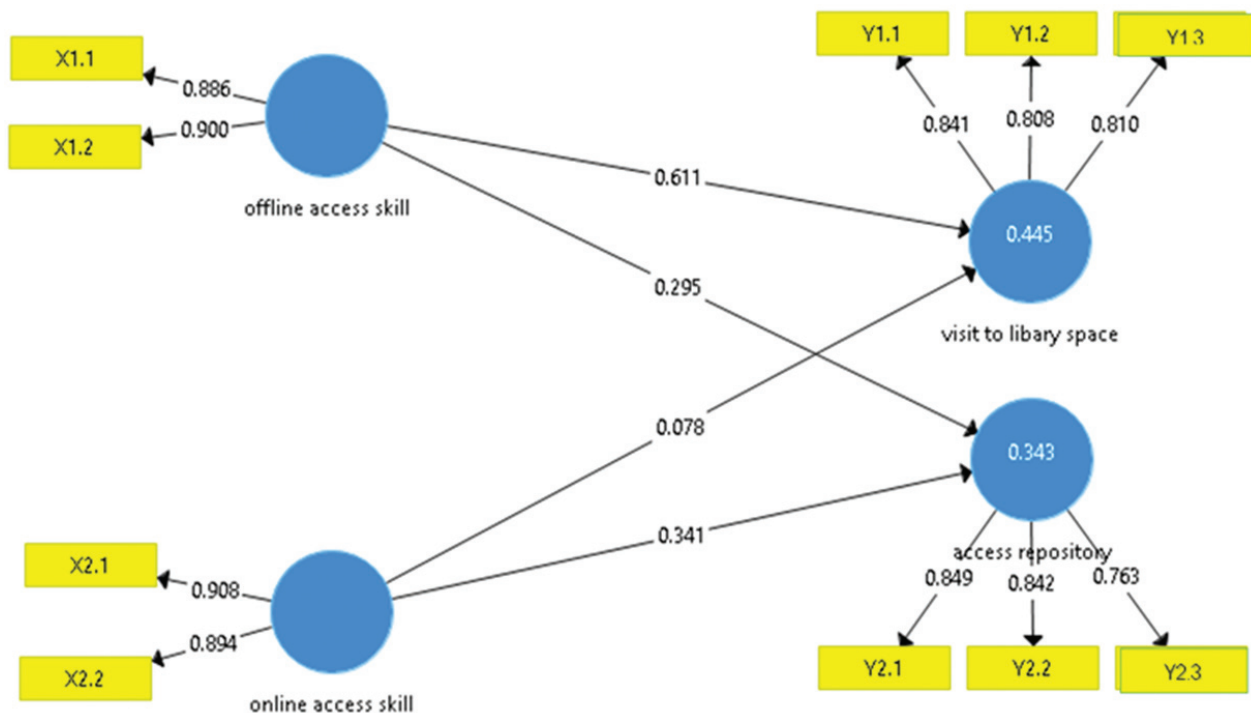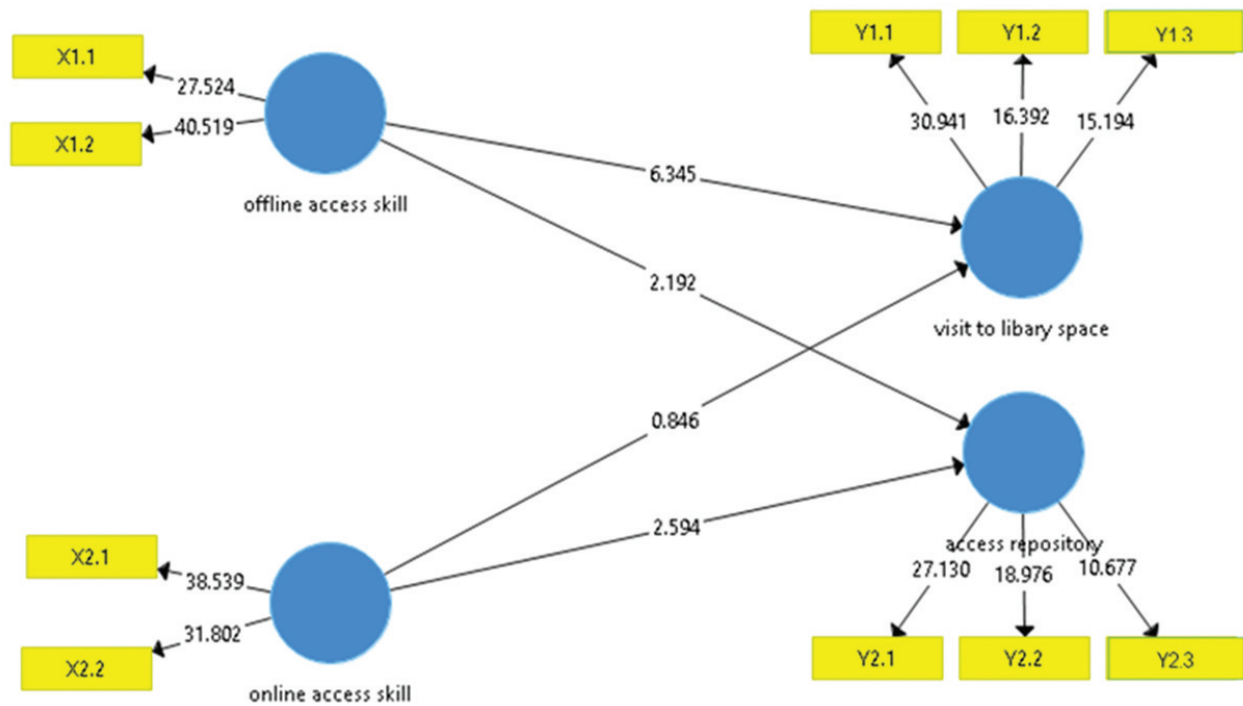

Figure 4. Outer loading.

Figure 5. Outer weight.

Table 4. Collinearity Statistics (VIF)

		VIF
Offline access skill	X1.1 Need	1.552
	X1.2 Location	1.552
Online access skill	X2.1 Need	1.638
	X2.2 Location	1.638
Visit library space	Y1.1 Attitude toward the behaviour	1.477
	Y1.2 Subjective norm	1.531
	Y1.3 Behavioral intention	1.588
Access to repository	Y2.1 Attitude toward the behaviour	1.509
	Y2.2 Subjective norm	1.625
	Y2.3 Behavioral intention	1.476

Table 4 indicates the colinearity value of the data displayed for the indicators used. The VIF value < 5, which means the data has no collinearity problems.

4.3 Hypotheses Test

After ensuring that the data is sufficient for statistical estimates and model measurements, further analysis of the research hypothesis test can be carried out.

Table 5 indicates that H1, H2, and H3 are accepted. However, H4 is rejected because of the P-value of > 0.05; It is that the online access skills of students to visit library space had no significant effect.

The value of R^2 indicates an endogenous variable was able to bt explained by some exogenous variables, i.e., the visit to library and access to repository variables can be explained by the access skill variable. The R^2 value in Table 6 is 0.343, and 0.445 meaning that the constructed model is moderate.

Table 6. R square

	R square	R square adjusted
Access to repository	0.343	0.328
Visit library space	0.445	0.433

Table 5. Hypotheses test

	Hypotheses	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics	P values	Description
H1	Offline access skill access to the repository	0.295	0.308	0.134	2.192	0.029	Significantly Affected
H2	Offline access skill visit to library space	0.611	0.619	0.096	6.345	0.000	Significantly Affected
H3	Online access skill access to the repository	0.341	0.337	0.131	2.594	0.010	Significantly Affected
H4	Online access skill visit to library space	0.078	0.079	0.092	0.846	0.398	Not Significantly Affected

5. DISCUSSION

We consider it a regular thing if online access skills have a significant effect on student's intention to access information in the online repository. Offline access skills substantially impact students' intent to access information in the online repository. However by analysis, it is found that offline access skills significantly affect students' intentions to access online information in the repository. In contrast, online access skills have no significant impact on students' intentions to visit the library space.

Library space is still indispensable. The library's physical environment triggers cognitive and emotional responses of users[22]. Librarians are also still involved in traditional roles[23]. A space to study in the library physically helps users in many ways of his study needs.

Previous study in 2017 showed that locate and access capability of UIN Saizu students was 2.79 out of 4 scale[6], which can be said to be quite good. However, it still needs to be improved because of the development of information technology in the library. This development influences the library management in communicating with users through social media and internet networks.

The above-mentioned factors influenced the promotion of academic library services through social media platforms such as facebook, Twitter, and Instagram[24]. Students' reliability to mobile gadgets is highly supportive to adopt online learning[25]. However, there are findings that although students are experts at simple skills in operating computers and the Internet, but are less skilled in relation to skills for using digital libraries[26]. Students required guidance for accessing an effective digital database[27]. It increases the ability to access online or digital media in the library. As the number of theses stored in the repository rises to[28], students who need research information must understand how to access it.

In the theory of reasoned action, subjective attitudes and norms influence an individual's desire to do or not to do something. This paper reveals that students who pose offline access skills desired to access information in the library online and offline. However, students who have online access skills only have the desire to access online information.

6. CONCLUSION

Even though it is now the digital era, offline access skills are still needed for students to be literate. Apart from the fact that not all library services have changed their form to digital, it is also because offline access skills have a significant effect on students' interest in accessing online services. Its means that if the student's offline access skills are high, the intention of students to access library services is high, both onsite services in the library and online services.

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